

Notice of Allowability

Application No.

09/882,005

Examiner

Ian N. Moore

Applicant(s)

LI, SHUO-YEN ROBERT

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/6/2006.
2. ☒ The allowed claim(s) is/are 36-40 which have been renumbered as 1-5.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 4-3-06.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Louis Sickles II on April 3, 2006.

The application has been amended as follows:

- **Claim 36, line 10, "each of the non-active external input ports" has been replaced with -- each non-active external input port - -**
- **Claim 36, line 19, "a real data packet" has been replaced with -- the real data packet - -**
- **Claim 36, line 19, "an idle packet" has been replaced with -- the idle packet - -**
- **Claim 36, line 22, "the j-th stage cell" has been replaced with -- a j-th stage cell - -**
- **Claim 39, line 5, "the tiebreaker" has been replaced with -- a tiebreaker - -**
- **Claim 39, line 7, "each of the j-th super-stage concentrators" has been replaced with - - each j-th super-stage concentrator - -**
- **Claim 40, line 7, "the tiebreaker" has been replaced with -- a tiebreaker - -**
- **Claim 40, line 11, "each of the j-th super-stage concentrators" has been replaced with -- each j-th super-stage concentrator - -**

Allowable Subject Matter

2. Claims 36-40 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Claims 36-40 are allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose the following italic limitations:

In claim 36, *...wherein the sorting by each of the sorting cells ...is based upon the leading two bits, which are either '10' or '11' for the real data packet, or '00' for the idle packet...the leading two bits of the routing tag of each of the packets at each of the j -th stage cell, $1 \leq j \leq k$, are always ' $1d_{j0}$ ' or '00'...* in combination with other limitations recited as specified in Claim 36.

Note that the closet prior arts **Yang (US005987028A)** discloses a method for self-routing a packet (see col. 10, lines 1-30; self-routing the cell) to a given destination address (see FIG. 11 and 20, output address $d_{n-1} d_{n-2} \dots d_0$; see col. 10, lines 9-14) through a network (see FIG. 5, 8, 9, 11 or 20; a bene, batcher, or banyan network), the network being characterized by a guide (see col. 10, lines 5-9; a control sequence: $c_{m-1} c_{m-2} \dots c_0$), the method comprising generating a routing tag (see FIG. 10, lines 10-14; see col. 17, lines 54 to col. 18, lines 14; routing tag R) for the packet with reference to the guide of the network and the destination address (see col. 10, lines 9-14; a routing tag), and routing the packet through the network using the routing tag (see col. 10, lines 1-54; see col. 17, lines 54 to col. 18, lines 14). **Lee (US006335930B1)** discloses a method for self-routing a packet (see col. 9, lines 60-65; see col. 10, lines 1-9; self-routing the packet) to a given destination address (see FIG. 2, 6

and 7, destination/output address; see col. 4, lines 9-25; see col. 10, lines 15-25) through a network (see FIG. 6 and 7; NxN network 600 and 700) the network being characterized by a guide (see FIG. 7, the routing bit; see col. 10, lines 5-9), the method comprising generating a routing tag (see FIG. 8, a routing tag; see col. 9, lines 65-67) for the packet with reference to the guide of the network and the destination address (see col. 10, lines 1-49; creating a routing tag with reference to the routing bit and destination address), and routing the packet through the network using the routing tag (see col. 10, lines 9 to col. 11, lines 55; routing in accordance with a routing tag).

However, neither Yang nor Lee fails to disclose or render obvious the above italic limitations as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

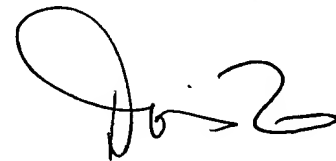
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JNM

INM
4-3-06



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600